

REMARKS

The Non-Final Office Action (hereinafter the Action) mailed April 12, 2006 has been reviewed and these remarks are responsive thereto. Claims 1-7, 9-12, and 14-16 remain pending in this application and currently stand rejected. Upon entry of this amendment, claims 1, 11, 15, and 16 are amended to clarify the claimed subject matter. Claim 14 has been cancelled. No new matter has been added.

Claim Rejections Under 35 U.S.C. §103

The Action rejected claims 1-7, 9-12, and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent App. Publication No. 2004/0038646 ("*Bourgart*") in view of U.S. Patent No. 5,706,333 ("*Grenning*"). Applicant respectfully traverses the rejections.

Amended claim 1 recites, inter alia, "determining whether at least one of a plurality of rules is invoked by the symptom input, wherein the plurality of rules comprise a plurality of if-then statements, wherein the plurality of if-then statements comprise a plurality of if portions and a plurality of then portions, the then portions corresponding to potential solutions to the problem, and wherein at least a portion of the plurality of rules is generated by a software application for interviewing cellular network site engineers" and "if so, then outputting a potential solution to the problem wherein the potential solution is determined by the invoked rule." The amendments are supported by the Specification (page 3, line 29 - page 4, line 1). According to amended claim 1, the plurality of rules, which are used to suggest potential solutions to a cellular network problem based on symptom inputs, are at least in part generated by interviewing cellular network site engineers.

Unlike the Applicant's amended claim 1, *Bourgart* teaches a portable and autonomous assistance device to derive information on faults in a private telecommunication installation comprising particularly equipment units to assist the client owning the installation in maintaining the latter. (*Bourgart*, Abstract, par. 10) Thus, *Bourgart* fails to disclose or teach plurality of rules, which are used to suggest potential solutions to a cellular network problem based on symptom inputs, are at least in part generated by interviewing cellular network site engineers, as recited in amended claim 1.

Bourgart further discloses an interactive maintenance session made up of questions and instructions that are presented on the display as a function of the responses of the client/user

thereby guiding the client/user step-by-step. (*Bourgart*, par. 51) Hence, *Bourgart* suggests a step-by-step guidance of a client in a question and instruction exchange session. This is different from the method recited in amended claim 1. Amended claim 1 includes entering symptom inputs, determining relevant rules, which present potential solutions to cellular network problems based on the symptoms, and providing the potential solutions based on the determined rules. According to the Applicant's amended claim 1, a site engineer attempting to repair a cellular network is not presented a step-by-step question / instruction session.

Grenning discloses a cellular telephone network with the capability to detect faulty cellular telephones in use in the network. According to *Grenning*, the network includes measurement units at some or all of the cell sites. The measurement units monitor the radio links between each cell site and specific cellular telephones. Measurements taken at all the cell sites are accumulated at a test system controller. The test system controller stores and processes the measurements to detect faulty cellular telephones. When a faulty cellular telephone is detected, the information is passed to a trouble manager. (*Grenning*, Abstract, col. 2, lines 27-42) *Grenning* also fails to teach or suggest a plurality of rules, which are used to suggest potential solutions to a cellular network problem based on symptom inputs, are at least in part generated by interviewing cellular network site engineers, as recited in amended claim 1.

Thus, *Bourgart*, and *Grenning* fail individually and in combination to teach or suggest features of the Applicants' amended claim 1. Amended claim 1 is therefore in condition for allowance, and notice to that effect is respectfully requested.

Claims 2-7, 9, and 10 depend from amended independent claim 1 with additional features. Thus, dependent claims 2-7, 9, and 10 are allowable for at least the same reasons discussed above with respect to amended claim 1. Therefore, based on the foregoing, the rejection of claims 2-7, 9, and 10 should also be withdrawn.

Amended claim 11 recites an expert system for troubleshooting a problem in a cellular network site, which includes components performing actions with similar features to the method of amended claim 1 such as "a knowledge database connected to the inference engine, wherein the knowledge database comprises a plurality of rules used to provide potential solutions to the problem, wherein the plurality of rules comprise a plurality of if-then statements wherein the if portion corresponds to the problem and the then portion corresponds to a potential solution, and

wherein at least a portion of the knowledge database is populated with the plurality of rules using a knowledge acquisition facility (KAF) comprising a software application for interviewing cellular network site engineers.” As discussed above, neither *Bourgart* nor *Grenning* teach or suggest, individually or in combination, populating a portion of the knowledge database with the plurality of rules using a software application for interviewing cellular network site engineers. Therefore, amended claim 11 is allowable for at least the same reasons discussed above. Notice to that effect is respectfully requested.

Claims 12 and 15 depend from amended independent claim 11 with additional features. Thus, dependent claims 12 and 15 are allowable for at least the same reasons discussed above with respect to amended claim 11. Therefore, based on the foregoing, the rejection of claims 12 and 15 should also be withdrawn. Claim 14 has been cancelled without prejudice or disclaimer.


Amended claim 16 recites a computer-readable medium with computer-executable instructions to perform a method for troubleshooting a problem associated with a cellular network site, where the method includes similar features to the method of amended claim 1 such as “determining whether at least one of a plurality of rules is invoked by the symptom input, wherein the plurality of rules comprise a plurality of if-then statements, wherein the plurality of if-then statements comprise a plurality of if portions and a plurality of then portions, the then portions corresponding to potential solutions to the problem, and wherein at least a portion of the plurality of rules is generated by a software application for interviewing cellular network site engineers.” Therefore, amended claim 16 is allowable for at least the same reasons discussed above. Notice to that effect is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call the Applicants; attorney at the number listed below.

Respectfully submitted,
MERCHANT & GOULD, LLC

Date: July 10, 2006



Roger T. Frost
Reg. No. 22,176

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
404.954.5100

